

In the Specification

On page 1, line 5, insert the following heading:

--Background of the Invention--

Please replace the paragraph on page 1, lines 19-28 with the following:

B1

--In terms of a modular structure the entire protocol of a communication is divided into layers. Each layer solves the tasks allocated to it by means of its own protocol. A communication between the adjacent layers is guaranteed via clearly defined interfaces. In this case, a layer n is linked to the layer n+1 directly on top thereof by rendering services to said layer, and to layer n-1 directly beneath said layer by using the services of said layer. Additionally there is a communication with layer n of the communication partner by using the services of all inferior layers. Thus, the logical data flow of protocol data units PDU is realized on respectively one protocol layer. On the receiving side the data are processed in a reverse sequence, i.e. the data are released from the lower layers to the protocol layers directly on top thereof.--

Please replace the paragraph on page 2, lines 11-22 with the following:

--The transport protocol TCP offers a reliable transmission service for a byte flow.

B2

Reliability hereby refers to being free of errors, maintenance of sequences and protection against data losses and duplicates. The error correction takes place by using the so-called ARQ (automatic repeat request) method. A copy of the packet to be sent is generated on the transmitting side and preserved until the data packet sent is generated on the transmitting side and

B2 preserved until the data packet sent is positively acknowledged by the opposite side. The receiver examines the packet received and acknowledges the correct receipt by means of a positive acknowledgment and rejects the receipt of an incorrectly received packet. In this respect it has to be noted that TCP does not allow the transmission of negative acknowledgments. The repeat of an incorrectly transmitted packet is effected by means of a mechanism based on the positive acknowledgments, i.e. if there is no positive acknowledgment the transmitter concludes under certain circumstances that a packet has not been received.--

Please replace the paragraph on page 2, lines 24-31 with the following:

B3 --The byte flow to be transmitted, which is passed from the application layer to the TCP layer, is divided into segments by the TCP for being transmitted as IP datagrams. An IP datagram designates a data packet being formatted according to the rules of the IP protocol. The property of datagrams consists in that the data exchange being realized by using datagrams is not reliable. Thus, the IP does not guarantee that a packet is indeed transmitted to a receiver. Also IP datagrams can be confused in their sequence, or can arrive at the receiver in duplicates. Within the limits of this concept it is, however, the task of TCP to detect the faulty transmission and to correct the errors that have occurred.--

Please replace the paragraph on page 3, lines 1-7 with the following:

B4 --The IP datagrams are, moreover, transmitted according to the hierarchy principle to the link layer arranged directly underneath. Said layer receives the IP datagrams and organizes them

B4
in so-called frames. This takes place by means of a method referred to as framing, i.e. the link layer packages an IP datagram in one or more frames, wherein the frames are limited by using specific bit combinations. It is specified as to which bit combination refers to the beginning separator, the so-called initial mark, and which to the end separator, the so-called end mark, of a frame.--

Please replace the paragraph on page 3, lines 19-26 with the following:

B5
--Protocols of the link layer are usually applied between physically directly adjacent network nodes. For this purpose a number of alternative protocols have been defined. As to which protocol is applied between two network nodes depends on the network by means of which the two network nodes are linked. The known point-to-point protocol, the PPP, forms an example for a protocol of the link layer. The PPP fulfills the first two jobs of the link layer - the framing and the error detection. Thus, the PPP does not perform a repeat of the incorrectly received packets. Even though there is a specific implementation mode of PPP working in a so-called, "numbered mode" RFC1663, it is usually not used.--

On page 7, in line 19, please insert the following heading:

--Summary of the Invention--

Please delete the entire paragraph on page 7, lines 25 and 26.

Please delete the entire paragraph on page 8, lines 11 and 12.

On page 8, line 13, please insert the following heading:

--Brief Description of the Drawings--

Please delete the entire paragraph on page 8, line 26.

On Page 8, line 27, please insert the following heading:

--Detailed Description of Exemplary Embodiments--

Please delete the entire paragraph on page 9, line 19.

Please replace the paragraph on page 12, lines 1-9 with the following:

--Said distinction is taken into account on the network protocol layer, such as the IP layer.

B6
Said layer receives packets from the transport protocol layer and packages them to form packets of their own format. Figure 5 illustrates a format of an IP packet. Said packet contains control data among which, for instance, the version of the IP protocol is included, for instance, IPv4 or IPv6. This has not been shown in detail in figure 5. Moreover, the IP data format is provided with a field containing the information in respect of the transport protocol. In case of a UDP

B6 protocol this means that a bit combination is entered into said field, which corresponds to the designation of the UDP.--

Please replace the paragraph on page 15, line 29 with the following:

B7 --The same refers to the UDP, where the change of the sequence of the packet is permitted.--

Please replace the paragraph on page 15, lines 31 and 32 with the following:

B8 --In the following, an implementation of the invention for the inter-flow mode is explained in more detail by means of figure 7.--

Please replace the paragraph on page 17, lines 29 and 30 with the following:

B9 --In the following, said embodiment is explained in more detail by means of figure 8.--
